



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave. S.W.
Washington, D.C. 20591

Report on the FY 1987 Safety Enforcement Program Performance of the Federal Aviation Administration

Washington, D.C.

May 1988

**Report of the Administrator of the
Federal Aviation Administration to
the United States Congress
pursuant to Section 101(I)
of the FY 1988 Continuing Appropriations
Resolution (Public Law 100-202)**

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MAY 19 1988

The Honorable George Bush
President of the Senate
Washington, DC 20510

Dear Mr. President:

I am pleased to transmit to you the report required by Section 101(1) (Title III, Sec. 317(a)) of P.L. 100-202, the Continuing Resolution for Fiscal Year 1988. This section calls for the submission of a comprehensive report on the Federal Aviation Administration's (FAA) prior year safety enforcement activities.

We continue to take strong and aggressive steps to improve our safety enforcement program. We are continuing to revise the criteria and procedures for hiring and training inspectors; update safety regulations while emphasizing program policy, guidance, and staffing standards; and strengthen program evaluation capability. The efforts have culminated in strong but fair FAA enforcement actions in 1987.

A copy of this report is also being provided to the Speaker of the House of Representatives, Jim Wright.

Sincerely,

T. Allan McArtor
Administrator

Enclosure



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Speaker of the House of Representatives
Washington, DC 20515

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REPORT TO CONGRESS
FY 1987 SAFETY ENFORCEMENT PROGRAM PERFORMANCE

I. EXECUTIVE SUMMARY

Introduction

This report is in response to the direction contained in Sec. 101 (1) (Title III, Sec. 317 (a)) of P.L. 100-202, the Continuing Resolution for Fiscal Year 1988. This section calls for the submission of a comprehensive report on the Federal Aviation Administration's (FAA) prior year safety enforcement activities.

Background

In April 1987, the FAA submitted a report to the House and Senate Appropriations Committees on its FY 1986 safety enforcement program which detailed our efforts to improve the operation of the safety enforcement program. Since then significant improvements have occurred in the operation of the FAA's safety enforcement program as a result of special emphasis programs and increased surveillance efforts by the safety inspectors. The resulting increase in the number of civil penalties sought in FY 1987, as reflected in this report, should have a strong deterrent effect on aircraft operators and will contribute toward improved compliance with safety regulations.

The FAA is continuing its efforts to improve and update its safety enforcement programs. These include updating safety regulations; realigning inspector duties and responsibilities to meet conditions in the aviation industry more closely; using automated program data and updated staffing standards to manage inspection resources; strengthening program evaluation capability; and assuring that inspection offices receive accurate, timely, and consistent program policy and guidance.

The following information responds to the specific areas addressed by the Congress.

II. INSPECTOR STAFFING

(1) a comparison of end-of-year staffing levels by inspector category (operations, maintenance, avionics) to staffing goals and a statement as to how staffing standards were applied to make allocations between air carrier and general aviation operations, maintenance, and avionics inspectors;

Response: The FAA Flight Standards field office staffing statistics for FY 1987 are summarized in the table below. The actual FY 1987 end-of-year field office inspector employment (1,939) met requirements (1,919).

FLIGHT STANDARDS FY 1987 FIELD OFFICE STAFFING

	<u>FULL-TIME PERM. POSITIONS AUTH.</u>	<u>TARGET EMPLOYMENT 9/30/87</u>	<u>ACTUAL ONBOARD EMPLOYMENT 9/30/87</u>
<u>General Aviation:</u>			
Operations Inspectors	706	670	674
*Airworthiness Inspectors	469	446	468
Sub-Total	1,175	1,116	1,142
<u>Air Carrier:</u>			
Operations Inspectors	462	439	422
*Airworthiness Inspectors	383	364	375
Sub-Total	845	803	797
Total	2,020	1,919	1,939

Source: Aviation Standards Monthly Aviation Inspector Staffing Report.

*The Airworthiness Inspector Category is comprised of maintenance and avionics inspectors.

FLIGHT STANDARDS FY 1988 AND FY 1989 FIELD OFFICE STAFFING

	<u>FULL-TIME PERMANENT POSITIONS AUTHORIZED*</u>	
	<u>FY-1988</u>	<u>FY-1989</u>
	<u>Enacted</u>	<u>Budget Request</u>
<u>General Aviation:</u>		
Operations Inspectors	768	873
Airworthiness Inspectors	511	580
Sub-Total	1,279	1,453
<u>Air Carrier:</u>		
Operations Inspectors	502	571
Airworthiness Inspectors	417	474
Sub-Total	919	1,045
Total	2,198	2,498

*Field office inspector employment target is 95 percent of authorized, i.e., 2,088 (inspectors on board) in FY 1988 and 2,373 in FY 1989.

Source: Aviation Standards Monthly Aviation Inspector Staffing Report.

Staffing Standards Application to Inspector Position Allocation.

The occupational staffing standard applicable to aviation safety inspector positions is based upon a comprehensive job task analysis (JTA). For each JTA task, the standard contains a frequency measure which shows how often each task should be performed for each part of the aviation environment, the number of environmental units which exists, and a work rate. From these factors, the total staffing required to perform each task can be computed. In addition, factors are included in the standard to cover indirect work elements that have an impact on time and work requirements. These factors reflect time allowances for training and administrative areas such as an allowance for leave based on the analysis of leave usage data from the payroll system.

In FY 1987, allocations of inspector positions were made to the nine FAA regions based on the occupational staffing standard. Positions were allocated based on the region's percentage of the total aviation environment. The allocation between air carrier and general aviation and between operations, maintenance, and avionics inspectors is derived from the task data in the staffing standard.

The staffing standard is refined and validated on a cyclical basis. As new environmental data are collected and analyzed, adjustments are made in the allocations between regions and between inspector specialties. During FY 1987, staffing levels were carefully monitored for the proper mix of inspector specialties and timely filling of authorized positions. National staffing totals met or exceeded target authorizations with the exception of the air carrier operations inspector specialty which was seventeen short of the target. Variances in individual inspector specialties may continue to occur until full staffing for aviation safety inspectors, as determined by the staffing standard, is attained in FY 1991.

III. INSPECTOR EXPERIENCE

(2) schedules showing the range of inspector experience by various inspector work force categories, and the number of inspectors in each of the categories who are considered fully qualified.

Response: The following tables show the range of total Aviation Safety Inspector experience and the number of inspectors who are considered fully qualified by work force category.

RANGE OF AVIATION SAFETY INSPECTOR EXPERIENCE BY WORK FORCE CATEGORIES As of September 30, 1987

<u>Category</u>	<u>Total On Board</u>	<u>Average Years Experience As Inspector</u>
Air Carrier-Operations	479	7.07
Air Carrier-Airworthiness	323	6.67
Air Carrier-Avionics	82	10.54
General Aviation-Operations	671	7.51
General Aviation-Airworthiness	413	7.58
General Aviation-Avionics	90	13.13
Other GS-1825 personnel*	<u>119</u>	<u>14.09</u>
Total	2,177	Total Average 8.74

Source: CPMIS and Regional Flight Standards Divisions.

*Includes GS-1825 (Aviation Safety Inspector series) managers, supervisors, Accident Prevention Specialists, Aircraft Evaluation Staff, Airspace Aviation Safety Inspectors, Simulator Team, Flight Procedures Section, and Technical Evaluation Officers.

NUMBER OF FULLY QUALIFIED INSPECTORS BY WORK FORCE CATEGORIES

As of September 30, 1987

<u>Category</u>	<u>Number</u>
Air Carrier-Operations	393
Air Carrier-Airworthiness	246
Air Carrier-Avionics	64
General Aviation-Operations	511
General Aviation-Airworthiness	289
General Aviation-Avionics	77
Other GS-1825 personnel	118
Total Number of Fully Qualified Aviation Safety Inspectors	1,698

Source: Regional Flight Standards Divisions.

IV. INSPECTOR TRAINING

(3) schedules showing the number and percentage of inspectors who have received mandatory training by individual course, and the number of inspectors, by work force categories, who have received all mandatory training.

Response: The following tables show the individual mandatory training courses for each work force category and the total number and percentage of inspectors by work force category who have received all mandatory training:

MANDATORY "STRING" COURSES FOR AVIATION SAFETY INSPECTORS

23979 - Air Carrier-Operations (34 days)

21405 - Aviation Safety Inspectors Orientation
21204 - A/C Ops Inspector Turbojet Evaluation
21607 - A/C Ops Indoctrination
00001 - Accident Investigation
12020 - Compliance and Enforcement

23980 - General Aviation-Operations (48 days)

21405 - Aviation Safety Inspectors Orientation
20700 - G/A Operations Indoctrination
22100 - Air Taxi Ops Certification and Inspection
12020 - Compliance and Enforcement
00001 - Accident Investigation

23981 - Air Carrier-Airworthiness (33 days)*

21405 - Aviation Safety Inspectors Orientation
21601 - A/C Maintenance Electronics Indoctrination
12020 - Compliance and Enforcement
00001 - Accident Investigation

23982 - General Aviation-Airworthiness (48 days)*

21405 - Aviation Safety Inspectors Orientation
21603 - G/A Indoctrination for Aviation Safety Inspectors/Airworthiness
12020 - Compliance and Enforcement
21828 - A/C Operator Certification and Surveillance Airworthiness
00001 - Accident Investigation

*Avionics inspectors take the appropriate Airworthiness string courses.

NUMBER AND PERCENTAGE OF INSPECTORS WHO HAVE RECEIVED
ALL MANDATORY TRAINING BY WORK FORCE CATEGORIES
As of September 30, 1987

<u>Category</u>	<u>*Total Number of Inspectors</u>	<u>Number of Inspectors Who Have Completed Mandatory Training</u>	<u>Percentage</u>
Air Carrier-Operations	479	457	95%
Air Carrier-Airworthiness	323	303	94%
Air Carrier-Avionics	82	78	95%
General Aviation-Operations	671	593	88%
General Aviation-Airworthiness	413	378	91%
General Aviation-Avionics	90	88	98%
Other GS-1825 personnel**	<u>119</u>	<u>118</u>	<u>99%</u>
Total	2,177	2,015	93%

*Includes field office inspector staffing as well as regional, center, and Washington headquarters inspectors.

**Includes GS 1825 (Aviation Safety Inspector series) managers, supervisors, Accident Prevention Specialists, Aircraft Evaluation Staff, Airspace Aviation Safety Inspectors, Simulator Team, Flight Procedures Section, and Technical Evaluation Officers.

Source: Regional Flight Standards Divisions.

V. ANNUAL WORK PROGRAMS

(4) a description of the criteria used to set annual work programs, an explanation of how these criteria differ from criteria used in the prior fiscal year and how the annual work programs ensure compliance with appropriate Federal regulations and safe operating practices;

Response: The criteria for safety inspection national work programs are described in two documents. They are FAA Order 1800.56, "Administration of Aviation Standards Activities - Program Guidelines" and the "1987 Flight Standards National Aviation Safety Inspection Program."

Administration of Aviation Standards Activities Program Guidelines.

The intent in annually reviewing the National Program Guidelines is to make only necessary changes in the numbers and types of inspections required and to provide clarification where required. Most changes made between FY 1986 and FY 1987 programs fell into those areas, based on the initial year's experience with Program Guidelines. Two significant changes were made. One added air carrier compliance alert indicators to assist managers and inspectors to identify potential safety deficiencies and the other placed emphasis on special surveillance areas which were identified through

reviewing the results of the National Air Transportation Inspection (NATI), the General Aviation Safety Audit (GASA), the National Aviation Safety Inspection Program (NASIP), and regional inspections. These changes resulted from recommendations by the GAO and others that the field office manager be given guidance and assistance in identifying areas that could require the assignment of inspection resources in addition to those devoted to nationally required inspections.

First published October 11, 1985, in FAA Order 1800.56, the Program Guidelines establish work program criteria for Flight Standards field elements. The Program Guidelines criteria set priorities within the annual work program. They specify a baseline surveillance program to ensure systematic accomplishment of minimal inspection activities and establish priorities for investigations, certification, and aviation education and safety promotion.

Surveillance (inspection) takes precedence over all other Flight Standards field activities. As a minimum, specific inspections are required to be performed on each air carrier certificated under Federal Aviation Regulations (FAR) Part 121 and Part 135. In the case of scheduled air carriers, the guidelines require 40 (32 in 1986 Program Guidelines) specific types of inspections, while 37 (28 in 1986 Program Guidelines) types of inspections are required for each nonscheduled air carrier. These inspections are to be conducted by operations, maintenance, and avionics inspectors to ensure compliance with the FAR and continued safe operating practices by the airline industry.

The Program Guidelines also specify other activities in addition to air carrier surveillance, such as the inspection of all repair stations certificated under FAR Part 145 and pilot schools certificated under FAR Part 141. Also, the FAA designates certain persons to perform examinations of pilots, mechanics, etc., on behalf of the FAA. These designees are also required to be inspected by the FAA. Finally, specific inspections are required of operators of large aircraft certificated under FAR Part 125.

District office managers schedule thousands of inspections throughout the aviation community similar to those specified in the Program Guidelines. The frequency and depth of these additional inspections are based on many factors, including the size and scope of an operator, changes in ownership or fleet size and complexity, indications of financial or labor difficulties, the operator's regulatory compliance record, and findings from special inspections. District office employees inspect operators for which the office has direct certificate responsibility as well as operators whose activities bring them within the area of geographic responsibility for that office, although the certificate management responsibility rests with another district office. The minimum required surveillance activities specified in FAA Order 1800.56, together with the inspections programmed locally, represent a minimum of 35 percent of the total work hours available for Aviation Safety Inspectors.

After surveillance, inspector resources are expended, in priority order, on work activities associated with investigations, certifications, and aviation education and safety promotion. These activities include accident, incident and compliance and enforcement investigations; certification of Part 121 and Part 135 air carriers and additional approvals (added equipment); and designation of pilot and mechanic

examiners; and attendance and/or FAA representation at flight instructor refresher courses, public/user meetings, inspection authorization refresher courses and aircraft maintenance industry seminars. Emphasis is also placed on the agency's accident prevention programs.

Several major changes were made in the Program Guidelines for FY 1987. One change emphasized special surveillance areas which were identified through reviewing the results of the National Air Transportation Inspection (NATI), the General Aviation Safety Audit (GASA), the National Aviation Safety Inspection Program (NASIP), and regional inspections. Air carrier safety compliance alert indicators were added to assist managers and inspectors to identify potential safety deficiencies. Many existing requirements were refined based on the initial year's experience under Program Guidelines.

1987 National Aviation Safety Inspection Program (NASIP).

The 1987 Flight Standards National Aviation Safety Inspection Program, contained in FAA Notice N8000.271, directs the conduct of comprehensive inspections of air carriers and repair stations. A total of 9 Part 121 air carriers, 3 Part 135 commuters, 14 pilot schools, and 6 repair stations were inspected under the 1987 NASIP. Special emphasis inspections on Delta and Eastern Air Lines and on five Part 121 cargo-only operators were also conducted. The objective of the inspections is to ensure that operations are in compliance with the FAR and to correct deficiencies as necessary. The program institutionalizes the inspection methodology developed for the 1984 NATI program. Inspections are conducted by teams of operations, maintenance, and avionics inspectors selected from FAA regions other than the certificate-holding region to the maximum practicable extent. The plan also increases standardization throughout all FAA regions by assigning responsibilities and establishing coordination procedures for conducting inspections. The FY 1987 NASIP plan added Part 135 commuters and Part 141 pilot schools as types of operators to be inspected using NASIP inspection protocols. Also, NASIP teams were used to conduct the special inspections referenced above. Guidance provided to NASIP teams was updated and revised during the year based on analysis of prior year data.

The criteria set forth in the Program Guidelines and in the NASIP provide a comprehensive basis for regulatory oversight. These programs, taken together with the requirements for original certification, ensure regulatory compliance and adherence to safe operating practices by systematically sampling various segments of the industry to check continuing compliance with Federal regulations. The concept is that a high degree of compliance with safety regulations results in a high level of safety. Those found in noncompliance are subject to enforcement action that results in returning them to full compliance on a continuing basis or certificate suspension or revocation. This concept of systematically policing all segments of the aviation industry has a strong deterrent effect. Additionally, regulatory compliance is ensured through the following program features: (1) Inspection teams operating under the NASIP are composed of inspectors from regions other than the certificate-holding region to the maximum practicable extent. This enhances objectivity and standardization; (2) The National Program Guidelines are revised annually based on regional recommendations, findings from special indepth inspections and internal program evaluations;

(3) Indepth inspections are conducted in accordance with detailed inspection protocols; and (4) Program effectiveness is assessed through quarterly progress reviews of data collected and maintained in an automated system designed to track work program accomplishments.

VI. FY 1987 INSPECTIONS

(5) a comparison of actual inspections performed during the fiscal year to the annual work programs disaggregated to the field locations and, for any field location completing less than 80 percent of its planned number of inspections, an explanation as to why annual work program plans were not met;

Response: Attachment 1 is a summary report generated from data collected in the Work Program Management System (WPMS), which is a subsystem of the Aviation Safety Analysis System (ASAS). The WPMS provides a standardized method of recording data related to the work program of the technical field office staffs. This summary is for FY 1987 and includes the planned annual work program activities that are required by FAA Order 1800.56, Administration of Aviation Standards Activities - Program Guidelines, as well as all locally scheduled inspections which are in addition to those required by the Program Guidelines. Activities actually accomplished are listed in numerical amounts, as well as a percentage of the planned activities.

The data show that annual work program plans were not completed. Several factors contributed to this situation. The baseline inspection program, which is required by the Program Guidelines, defines a work program based on the occupational staffing standard. Aviation safety inspector staffing had not yet reached the full level required by the standard because FAA must also take into consideration its capacity to hire, train, and smoothly transition new inspectors into the work force effectively. Until full staffing is reached, it is critical that all operators be inspected through either the "baseline" or other program. The requirements for performing the inspections are identical.

A second factor influencing completion percentages involves data entry. Any inspection may be credited against either "baseline" or "other" inspections. In some instances, field personnel did not credit completion of nationally required program items when the same activity could have been credited as either a "baseline" or "other" inspection. Finally until late in FY 1987, the WPMS computer software did not permit deletion of programmed inspection when operators merged, went bankrupt, surrendered a certificate, or left the geographic area serviced by a district office. There was no way to adjust the planned program to account for a changed environment, thereby increasing the number of inspections which could not be accomplished. Although the software was amended, available data do not show that all offices made changes prior to the end of FY 1987.

VII. MANAGEMENT CONTROL

(6) a statement of the adequacy of Federal Aviation Administration internal management controls available to ensure that field managers are complying with Federal Aviation Administration policies and procedures including those regarding inspector priorities, district office coordination, minimum inspection standards, and inspection follow-up;

Response: FAA is continuing aggressively to implement and institutionalize a more systematic approach to ensure that field managers are complying with FAA policies and procedures, including those regarding inspector priorities, district office coordination, minimum inspection standards, and inspection follow-up.

The initiation of Project SAFE was the beginning of a changed FAA posture toward accomplishment of the Flight Standards mission through more effective and efficient utilization of resources. The job task analysis (JTA) executed during Project SAFE provided comprehensive documentation for each task performed by inspectors and became the foundation for the development of a more effective process for managing the inspection program. The JTA is the linkage between all of the components of the Flight Standards System.

Project SAFE led to the development of internal control mechanisms and procedures in the following areas:

PLANNING AND POLICY GUIDANCE:

- ° Continued implementation of Project SAFE activities through the use of matrix management concepts, including teams of headquarters/field personnel. Teams include operations and airworthiness personnel from both air carrier and general aviation options. Also included are supervisory and non-supervisory personnel.
- ° Development and execution of long-range strategic plans in conjunction with FAA planning processes.
- ° Implementation of a comprehensive, integrated annual Call for Requirements which provides up-to-date information for key management decisions and resource documents, including the National Program Guidelines.
- ° Cyclic review of staffing standards, national work program guidelines, special emphasis inspection activities, and training programs.
- ° Annual publication of National Program Guidelines, which prescribe a baseline surveillance program to ensure systematic accomplishment of minimal inspection activities and establish priorities for investigation, certification, and aviation education programs.

PROGRAM ORGANIZATION AND APPLICATION

- ° Standardization of position descriptions and standards of performance for each aviation safety inspector occupational option.
- ° Development of national parameters to ensure standardization in alignment of organizational functions.
- ° Biennial review of staffing standards to assure accuracy and validity.
- ° Standardization and revision of Airworthiness, Air Carrier Operations and General Aviation Operations Inspector Handbooks.
- ° Continued update of Federal Aviation Regulations (FAR) to ensure appropriate regulation of the industry and the aviation community.
- ° Continuation of the National Aviation Safety Inspection Program, which provides for comprehensive, indepth inspections of air carriers, repair stations, and other categories of operators, to ensure compliance with the FAR and to correct deficiencies as necessary. These national inspections promote standardization in inspection activities and have, in some instances, identified deficiencies in routine surveillance activities.

PROGRAM EFFICIENCY AND EFFECTIVENESS:

- ° Establishment and implementation of the Flight Standards Evaluation System, designed to assess system performance and to ensure programs are administered according to current agency regulations, policies, and procedures. Standardized evaluation instruments have been developed and are used to assess the management of surveillance and certification programs, as well as operational efficiency and effectiveness. In addition, limited assessment of management support systems is done to determine the impact of such systems on operational effectiveness.
- ° Assessment of annual work program accomplishments through review and analysis of WPMS data.
- ° Correction of deficiencies in routine surveillance and certification activities as identified through the National Aviation Safety Inspection Program.

AUTOMATION SUPPORT:

- ° Headquarters staff has recently obtained electronic access to work accomplishment report data. This will enable Flight Standards to monitor trends and review data for greater accuracy.
- ° Needed changes in the automated reporting system have been implemented to increase data base accuracy.

- ° Software has been developed and is being tested for implementation of vital information and automated operations specifications subsystems.
- ° New WPMS software is being developed to permit easier entry of annual work program plans for more accurate accounting of work accomplishment.
- ° New hardware procurements have been initiated to permit replacement of aging and over-extended computer hardware with industry-standard, higher capacity equipment.
- ° A test program to permit automated analysis of inspection findings is underway. The new system will codify remarks from inspection reports and will, if adopted, expand the capability to analyze trends.
- ° The Department of Defense and FAA continue to develop the Air Carrier Analysis System (ACAS) jointly. ACAS is another example of using automated systems to enhance management of inspection resources.

VIII. UPDATE OF REGULATIONS AND GUIDANCE DOCUMENTS

(7) the status of the Federal Aviation Administration's efforts to update inspector guidance documents and Federal regulations to include technological, management, and structural changes taking place within the aviation industry, including a listing of the backlog of all proposed regulatory changes;

Response: The handbooks for airworthiness inspectors, general aviation operations inspectors, and air carrier operations inspectors are being revised. A key element in the handbook development is the linkage between the new guidance material and training material which is incorporated into both classroom and on-the-job training. A review of preliminary handbook and training course material identified additional work which has been conducted to assure that, when published, the handbooks will be written in a way that supports the inspector training programs. Handbook chapters are now being developed around discrete JTA tasks to facilitate learning and retention. The scheduled publication will occur in late 1988.

There is no backlog of proposed regulatory changes critical to aviation safety. Actions on critical issues are implemented immediately through the use of airworthiness directives, emergency rules, and action notices. (Critical issues are taken to be those where failure to act expeditiously would have a potential immediate adverse impact on aviation safety.)

The FAA has a priority listing of current regulatory efforts underway to change or add to the Federal Aviation Regulations (FAR). This list is known as the "Top 26 Report" and contains those regulatory projects which are deemed to be of the highest priority by FAA top management, the Secretary of Transportation, or the Congress because of the enactment of legislation requiring the FAA to take action. Top 26 projects are scheduled priority projects in various stages of development. A list of those projects, for which Flight Standards has responsibility, is provided in Attachment 2. Attachment 3 lists additional priority and routine regulatory projects which are currently under development by Flight Standards. Attachment 4 lists those projects which were completed during FY 1987.

IX. OPERATIONAL MEASURES

(8) a list of the specific operational measures of effectiveness-- "best proxies" standing between the ultimate goal of accident prevention and ongoing program activities--that are being used to evaluate progress in meeting program objectives, the quality of program delivery, and the nature of emerging safety problems;

Response: Flight Standards is working to establish and validate systems that will provide the means to evaluate progress in meeting program objectives and the quality of program delivery and will be useful in identifying emerging safety trends and problems. The General Accounting Office (GAO) and others have recognized that FAA has not developed such systems in the past. We are not aware of, and therefore do not presently use, a list of "best proxies" as described. However, the following list of accomplishments is illustrative of the direction in which Flight Standards is moving to develop measures that can be used to evaluate progress in meeting program objectives, the quality of program delivery and the nature of emerging safety problems. Each action or system is subject to further review and refinement as experience and trends dictate.

- ° Under the Flight Standards Evaluation Program, checklists have been developed and tested in regional evaluations. These checklists measure the quality of program delivery by the FAA regional Flight Standards division including service delivery to the aviation community by FAA field offices.

- ° NASIP indepth inspections are conducted using standardized inspection protocols, and the inspection teams are composed of inspectors from regions other than the certificate holding region to the maximum practicable extent.

- ° NASIP findings are reviewed and compared to other indepth inspection findings to develop trend data. FY 1986 NASIP data were compared, where possible, to NATI data. FY 1987 NASIP data are now being analyzed and further comparisons will be made.

- ° Reports obtained from the Records Examination Assistance Program (REAP), a test program using auditors to determine the adequacy of recordkeeping systems, are distributed to certificate holding offices and regions for review and analysis.

- ° NASIP reports are subject to review and analysis by both headquarters and regional personnel to focus attention on an individual operator's compliance with the requirements of the FAR and safe operating practices.

- ° Special indepth inspection reports are reviewed and analyzed by headquarters and regional personnel for indication of trends, as well as for specific deficiencies.

- ° The FAA and the Department of Defense are jointly developing the Air Carrier Analysis System (ACAS), a system designed to determine correlations between information in FAA data bases and safety indicators.

- ° A test project, called Uniform Task Reporting (UTR), to codify remarks from inspection reports is underway. The UTR system will permit greater automated analysis of inspection findings.

° For the first time, the FY 1987 revision of the National Program Guidelines included air carrier compliance alert indicators. Each level responsible for surveillance, down to the individual inspector, is given guidance on indicators that may require increased surveillance of an operator. This guidance is reviewed and revised on an annual basis.

X. FY 1986 AND FY 1987 ENFORCEMENT ACTIONS - CIVIL PENALTIES

(9) a schedule showing the number of civil penalty cases closed during the two prior fiscal years, including total initial assessments, total final assessments, total dollar amount collected, range of dollar amount collected, average case processing time, and range of case processing time;

Response: The following chart summarizes the information requested:

<u>ENFORCEMENT ACTIONS</u> <u>CIVIL PENALTIES</u>		
<u>ACTION ITEMS</u>	<u>FY 1986</u>	<u>FY 1987</u>
Number of civil penalty cases closed	1,414	1,446
Initial recommended civil penalty amount for cases closed	\$9,106,586	\$9,058,546
Total amount of civil penalties collected	\$4,243,575	\$13,601,736*
Initial recommended civil penalty amounts for open cases initiated	\$11,324,672	\$27,401,343
Range of dollar amount sought/collected:		
Minimum amount	\$5	\$30
Maximum amount	\$700,000	\$9,500,000
Average case processing time (days) from date known to FAA to final date for all cases	102	183
Average case processing time (days) from date known to FAA to final date and final action as a civil penalty	345	338
Range of processing time from date known to FAA to final date for all cases		
Minimum days	22	33
Maximum days	716	591

*NOTE: This figure includes the settlement agreement with Eastern Air Lines to pay a \$9,500,000 civil penalty, the same amount of civil penalty that was initially sought by the Southern Region in its civil penalty letter to Eastern Air Lines. Pursuant to the settlement agreement, Eastern Air Lines paid \$1,000,000 in February 1987. Payment of the remaining \$8,500,000 is due on or before December 31, 1989.

Due to the developmental nature of the Enforcement Information System (EIS), some FY 1987 data may not yet be in the system.

Source: FAA National Safety Data Branch

XI. FY 1986 AND FY 1987 ENFORCEMENT ACTIONS - EXCLUDING CIVIL PENALTIES

(10) a schedule showing the number of enforcement actions taken, excluding civil penalties, during the two prior fiscal years, including total number of violations cited, and the number of cited violation cases closed by certificate suspension, certification revocations, warnings, and no action taken; and

Response: The following charts provide the information requested:

ENFORCEMENT ACTIONS - EXCLUDING CIVIL PENALTIES

<u>ACTION ITEMS</u>	<u>Number of Cases Initiated</u>	<u>FY 1986</u>	
		<u>Number of Cases Closed</u>	
		<u>FY 1986 Cases</u>	<u>Prior Yr Cases **</u>
Administrative Actions*	5,982	4,229	1,041
Aircraft Seizure	0	0	0
Cease and Desist Order	4	0	1
Certificate Revocation	750	176	280
Certificate Suspension	2,848	611	1,110
Criminal Action	8	0	0
Emer. Cease and Desist Order	0	1	0
Immunity due to NASA Safety Rpt	0	53	77
Injunction	4	0	1
No Action	1,802	1,184	1,240
Order of Compliance	0	0	0
Other Order	6	15	10
Referral to DOD	238	155	65
Referral to Foreign Govt.	25	7	8
Total.....	11,667	6,431	3,833

*Administrative Actions include Warning Letters and Letters of Correction.

**Reflects cases closed in FY 1986 but were initiated in prior fiscal years.

Source: FAA National Safety Data Branch

ENFORCEMENT ACTIONS - EXCLUDING CIVIL PENALTIES

<u>ACTION ITEMS</u>	<u>Number of Cases Initiated</u>	<u>FY 1987 Number of Cases Closed</u>	
		<u>FY 1987 Cases</u>	<u>Prior Yr Cases **</u>
Administrative Actions*	4,922	3,892	1,407
Aircraft Seizure	1	0	1
Cease and Desist Order	1	0	1
Certificate Revocation	553	85	274
Certificate Suspension	3,758	657	1,079
Criminal Action	5	0	0
Emer. Cease and Desist Order	0	0	0
Immunity due to NASA Safety Rpt	0	52	121
Injunction	5	0	1
No Action	1,733	1,453	1,409
Order of Compliance	4	0	4
Other Order	2	15	122
Referral to DOD	250	117	48
Referral to Foreign Govt.	30	2	12
Total.....	11,264	6,273	4,479

*Administrative Actions include Warning Letters and Letters of Correction.

**Reflects cases closed in FY 1987 but were initiated in prior fiscal years.

Due to the developmental nature of the Enforcement Information System (EIS), some FY 1987 data may not yet be in the system.

Source: FAA National Safety Data Branch

XII. SAFETY STATISTICS

(11) "...schedules showing the aviation industry's safety record during the fiscal year for air carriers and general aviation, including the number of inspections performed where deficiencies were identified compared with inspections where no deficiencies were found and the frequency of safety deficiencies per carrier as well as an analysis based on the data of the general status of air carrier and general aviation compliance with Federal Aviation Regulations."

Response: Attachments 5, 6, 7, and 8 of this report update the safety statistics presented in the FY 1986 Report. These statistics reflect the total number of accidents, the number of fatal accidents, and comparable accident rates per flight hours for each segment of the industry--air carrier, general aviation, commuter, and air taxi.

Attachment 9 contains statistics extracted from the Work Program Management System (WPMS), which is an automated administrative management information system that tracks the status of inspections as well as other work functions. This data reflects FY 1987 WPMS surveillance activity for Part 121 air carriers and for Part 135 commuter air carriers. Each schedule presents the data for individual air carriers and includes the number of "satisfactory" surveillance actions, the "other than satisfactory" surveillance actions, the total number of surveillance actions, and the percentage of inspections classified as "other than satisfactory."

It should be noted that the WPMS system requires entry of "results" data for each inspection. Such data are recorded by prescribed activity codes designed for administrative work management purposes. Each activity code represents a specific action status for each surveillance activity. One of these codes annotates "satisfactory" surveillance and is used when no discrepancies are found during inspection. The remaining activity codes, which comprise the "other than satisfactory" category, cover an array of circumstances which are not necessarily unsatisfactory. The "other than satisfactory" category represents the following action status:

- activity has been started;
- activity is planned;
- activity completed and record closed - more information available;
- activity was satisfactorily completed after follow-up action was taken on inspection findings;
- surveillance activity was unsatisfactorily completed and enforcement actions are indicated;
- surveillance activity is canceled.

Codes entered for other than satisfactory status may potentially indicate a safety deficiency, particularly if corrective or enforcement action is necessary. However, the need for corrective action may be as simple as the need to refile pages in an operations manual to assure proper sequence. Recordation of codes for other than satisfactory status is often an indication that a surveillance activity is producing desired results that lead to acceptable administrative remedies in many cases. Without a case-by-case analysis of over 29,000 records, however, no conclusions can be

drawn on whether safety deficiencies exist at any air carrier or, more generally, on the air carrier and Part 135 commuter segments of the industry. Therefore, the percentage of inspections classified as "other than satisfactory" should not be construed to be the frequency of safety deficiencies per carrier. The FY 1987 enforcement data provided in this report (see Section XI) are the only available data that documents non-compliance with the FAR or with an operator's approved program.

Existing systems are not sufficiently structured to provide correlational analyses among the number of inspections, inspection findings, and compliance with Federal Aviation Regulations (FAR). Existing information systems are geared toward the management and administration of the annual work program as prescribed by the National Program Guidelines along with locally programmed surveillance deemed necessary to ensure minimum coverage of the industry. These systems are effective for their intended administrative uses--program planning and tracking. They also provide limited data on inspection results and enforcement activities which, collectively, may serve to identify trends in potential safety performance. Such data, however, have not been shown to be suitable for determining the general status of air carrier and general aviation compliance with the FAR.

Although existing automated information systems are limited, the FAA has and is conducting the types of industry-wide compliance and safety analyses requested in this report. In 1984, the FAA conducted the National Air Transportation Inspection, an indepth analysis of the air carrier industry, which concluded that the aviation industry subject to the NATI examination was generally in compliance with the FAR. In 1986, a similar study of general aviation commercial enterprises was completed. This study--the General Aviation Safety Audit--similarly concluded that, in general, the industry was in compliance with federal regulations.

The National Aviation Safety Inspection Program (NASIP), which institutionalizes the procedures used in NATI and GASA, is an ongoing "white glove" inspection program designed to determine the regulatory compliance status of air carrier and other commercial operators holding FAA certificates. The FY 1986 NASIP report provides a qualitative analysis of the data from the NATI, GASA, and the first full year of NASIP inspection findings. A copy of this report is being forwarded to the Appropriations Committees under separate cover for future reference. The final FY 1987 NASIP report is being prepared and will provide a comparative analysis to the FY 1986 NASIP report. We will provide a copy of the FY 1987 report to the Appropriations Committees, under separate cover, as soon as it is published.

FAA is fully aware of the need to develop safety indicators which are more sensitive to system changes and are predictive in nature. We are also interested in implementing a program that will enable the FAA to continually assess the status of system safety and focus resources on emerging difficulties. To this end, as part of FAA's Impact '88 Program, the Office of Aviation Safety has been tasked to develop a comprehensive set of indicators for measuring the safety of the National Airspace System. The indicators are being developed in two phases: Air Traffic System Safety Indicators and Flight Operations Safety Indicators. The Air Traffic prototype will be operational by June 1989 and the Flight Operations prototype by February 1990.

SUMMARY OF FY 1987 SURVEILLANCE INSPECTIONS

<u>REGION</u>	<u>BASELINE INSPECTIONS*</u>		<u>OTHER INSPECTIONS**</u>		<u>TOTAL INSPECTIONS</u>	
	<u>PLANNED</u>	<u>ACTUAL</u>	<u>PLANNED</u>	<u>ACTUAL</u>	<u>PLANNED</u>	<u>ACTUAL</u>
						<u>PERCENT</u>
<u>ALASKAN REGION:</u>						
Operations	1208	1179	2329	2028	3537	3207
Maintenance	1359	1334	1755	1396	3114	2730
Avionics	1085	773	142	109	1227	882
				<u>Totals</u>	7878	6819
						90.67
						87.67
						71.88
						86.56
<u>CENTRAL REGION:</u>						
Operations	1737	1518	5762	4701	7499	6219
Maintenance	1459	1317	7287	5584	8746	6901
Avionics	1339	1171	1469	1104	2808	2275
				<u>Totals</u>	19053	15395
						82.93
						78.90
						81.02
						80.80
<u>EASTERN REGION:</u>						
Operations	5100	3660	11157	9522	16257	13182
Maintenance	4101	3137	10028	8816	14129	11953
Avionics	3224	1616	2440	1911	5664	3527
				<u>Totals</u>	36050	28662
						81.09
						84.60
						62.27
						79.51
<u>GREAT LAKES REGION:</u>						
Operations	4691	3769	14045	11819	19006	15588
Maintenance	3391	2786	11658	9027	15049	11813
Avionics	2937	1665	2954	2663	5891	4328
				<u>Totals</u>	39946	31729
						82.01
						78.50
						73.47
						79.43

<u>REGION</u>	<u>BASELINE INSPECTIONS</u>			<u>OTHER INSPECTIONS</u>			<u>TOTAL INSPECTIONS</u>		
	<u>PLANNED</u>	<u>ACTUAL</u>	<u>PERCENT</u>	<u>PLANNED</u>	<u>ACTUAL</u>	<u>PERCENT</u>	<u>PLANNED</u>	<u>ACTUAL</u>	<u>PERCENT</u>
NEW ENGLAND REGION:									
Operations	1620	1492	92.10	1878	1782	94.89	3498	3274	93.60
Maintenance	1249	1184	94.80	1688	1497	88.68	2937	2681	91.28
Avionics	1257	908	72.24	237	235	99.16	1494	1143	76.51
						<u>Totals</u>	7929	7098	89.52
NORTHWEST MOUNTAIN REGION:									
Operations	2586	2365	91.45	11008	10030	91.12	13594	12395	91.18
Maintenance	2643	2491	94.25	11750	8206	69.84	14393	10697	74.32
Avionics	1309	1070	81.74	2456	1450	59.04	3765	2520	66.93
						<u>Totals</u>	31752	25612	80.66
SOUTHERN REGION:									
Operations	3995	3407	85.28	16276	13007	79.92	20271	16414	80.97
Maintenance	3459	3027	87.15	20237	15133	74.45	23786	18160	76.35
Avionics	2732	1970	72.11	4710	3054	64.84	7442	5024	67.51
						<u>Totals</u>	51499	39598	76.89
SOUTHWEST REGION:									
Operations	3829	3488	91.09	15324	14971	97.70	19153	18459	96.38
Maintenance	3030	2846	93.93	16702	14556	87.15	19732	17402	88.19
Avionics	2225	1905	84.48	3209	2959	92.21	5464	4864	89.02
						<u>Totals</u>	44349	40725	91.83

REGION	BASELINE INSPECTIONS			OTHER INSPECTIONS			TOTAL INSPECTIONS		
	PLANNED	ACTUAL	PERCENT	PLANNED	ACTUAL	PERCENT	PLANNED	ACTUAL	PERCENT
WESTERN-PACIFIC REGION:									
Operations	6114	5023	82.16	12028	10755	89.42	18142	15778	86.97
Maintenance	5002	3579	71.55	11716	9357	79.87	16718	12936	77.38
Avionics	3766	2096	55.66	2430	1988	81.81	6196	4084	65.91
						<u>Totals</u>	41056	32798	79.87
						NATIONAL TOTALS	279512	228436	81.73

*Baseline Inspections are those minimum numbers recommended for systematically scheduling inspections and utilizing resources for surveillance of the industry on an annual basis. These minimums are published in FAA Order 1800.56, Administration of Aviation Standards Activities - Program Guidelines.

**Other Inspections are those discretionary inspections deemed necessary by FAA regional/district managers to monitor effectively the industry OR those on-demand inspections required by changes in the environment or resulting from enforcement actions. These inspections are in addition to the baseline/minimum inspections recommended in the program guidelines.

NOTE: The number of planned inspections reflects dynamic changes resulting from environmental or industry changes.

TOP 26 PROJECTS
(Current as of 1/28/88)

<u>Project No.</u>	<u>Subject</u>
VS-85-019-R	Establish Airman Certificate requirements for operators of powered aircraft.
VS-87-115-R	Potential suspension/revocation of pilot's certificates for multiple DWI convictions.
VS-83-133-P	Establish a new category of aircraft called "primary category" not previously certificated (includes powered ultralights).
VS-84-191-R	Miscellaneous operational amendments covering multiple topics.
VS-84-173-R	Establish new pilot certificate: recreational pilot.
FS-77-232-R	Wind Shear Equipment and training requirements.
VS-86-270-R	Anti-drug program (testing) of certificated airman and personnel engaged in safety-related functions in aviation.
VS-87-153-R	Revision of foreign repair stations requirements.
VS-86-077-R	Number of flight attendants required for enplaning and deplaning.
VS-86-139-R	Amend mandatory reporting rules for emergency evacuation systems and components.
FS-78-303-R	Reorganize general operating and flight rules (Part 91) (at industry's request).
VS-87-045-R	Part 145 review (repair stations).

Project No.

Subject

VS-87-271-R	Part 121 Minimum equipment list (MEL) requirements to be made consistent with Part 135 Multiengine Mel.
VS-80-122-R	MEL supplement addresses inoperative equip.
VS-83-105-R	New criteria for use of simulator training procedures and equipment.
VS-86-206-R	Flight attendant flight time limitation and rest requirement.
VS-83-258-R	Amend 45.17 to comply with the US/Canadian bilateral for maintenance.

FLIGHT STANDARDS REGULATORY PROJECTS
CURRENTLY UNDER DEVELOPMENT

<u>Project Number</u>	<u>Title</u>
VS-81-129-R	Parts 61, 141, 143 (AFS)
VS-81-492-I	Agricultural Aircraft Operations Amendment
VS-81-531-I	Written Examinations
VS-82-129-I	Examining Authority Privileges
VS-82-150-I	Retesting After Failure
VS-83-169-R	Amendment of §§ 91.161(c) and 91.172 and Appendixes E and F of Part 43 (AFS)
VS-83-217-I	Rotorcraft Simulator Use in Airman Certification
VS-83-305-R	Instrument Approach Procedures - Inoperative Components or Visual Aids Table (AFS)
VS-83-343-R	Fuel Requirements for Flight under Instrument Flight Rules (AFS)
VS-84-090-I	Airborne Weather Radar Requirements for DC-3 Airplanes
VS-84-091-I	Part 121 Training Requirements
VS-84-092-I	Part 135 Aircraft Performance Requirements: Takeoff and Climb
VS-84-253-I	Revision to Part 87
VS-84-242-I	Parts 91 and 135: Navigation and Communication Requirements for Extended Overwater Operations
VS-85-031-R	Portable Electronic Devices (AFS)
VS-85-053-R	Extend Privileges of § 91.169 for Helicopters (AFS)
VS-85-060-R	Extension of Flight Engineer Written Results (AFS)
VS-85-253-I	Helicopter Category II IFR Operations (Parts 61 and 91)
VS-86-043-I	Air Transportation Regulation Update
VS-86-099-I	Aircraft Registration Applications
VS-86-156-R	Passenger-Carrying and Cargo Operations for Compensation or Hire; Related Editorial Changes (AFS)
VS-86-258-R	IFR Operations and Driftdown Procedures (AFS)
VS-87-059-R	ATA-Delete Burn Ointment from First Aid Kits (AFS)
VS-87-152-R	§ 91.79 Minimum Safe Operating Altitudes (AFS)
VS-87-211-R	Flight Engineer Training (AFS)
VS-87-264-I	Part 135 Applicability
VS-87-281-R	MEL for Part 135 (AFS)

PROJECTS COMPLETED (FINAL RULE) IN FY 1987

<u>Docket Number</u>	<u>Subject</u>	<u>Action</u>
24792	Protective Breathing Equipment	FR Published 6/3/87
24856	Foreign Air Carriers and Large U.S. Registered Aircraft	FR Published 5/28/87
25011	Gliders and Balloons	FR Published 5/6/87
24996	Carry-on Baggage	FR Published 6/5/87

AIR CARRIER SAFETY STATISTICS

YEAR	FLIGHT HOURS (Millions)	TOTAL ACCIDENTS	ACCIDENT RATE 1/	FATAL ACCIDENTS	FATAL ACCIDENT RATE 1/
1977	6.04	24	.40	5	.08
1978	6.23	22	.35	5	.08
1979	6.88	29	.42	5	.07
1980	7.07	19	.27	1	.01
1981	6.81	26	.38	4	.06
1982	6.70	19	.28	4	.06
1983	6.93	24	.35	4	.06
1984	7.76	16	.21	1	.01
1985	8.30	22	.27	7	.08
1986	9.72	22	.23	2	.02
1987(P)	10.15	36	.35	5	.05

1/ Per 100,000 flight hours

(P) Preliminary

Source: National Transportation Safety Board, SB 88-01

GENERAL AVIATION SAFETY STATISTICS

YEAR	FLIGHT HOURS (Millions)	TOTAL ACCIDENTS	ACCIDENT RATE 1/	FATAL ACCIDENTS	FATAL ACCIDENT RATE 1/
1977	31.58	4079	12.91	661	2.09
1978	34.89	4216	12.08	719	2.06
1979	38.64	3818	9.88	631	1.63
1980	36.40	3590	9.86	618	1.69
1981	36.80	3500	9.51	654	1.78
1982	32.10	3233	10.07	591	1.84
1983	31.05	3075	9.90	555	1.79
1984	31.51	3010	9.54	543	1.72
1985	30.60	2741	8.95	498	1.62
1986	29.32	2581	8.80	469	1.60
1987(P)	29.32	2420	8.25	426	1.45

1/ Per 100,000 flight hours

(P) Preliminary

Source: National Transportation Safety Board, SB 88-01

COMMUTER SAFETY STATISTICS

YEAR	FLIGHT HOURS (Millions)	TOTAL ACCIDENTS	ACCIDENT RATE 1/	FATAL ACCIDENTS	FATAL ACCIDENT RATE 1/
1977	1.15	44	3.83	9	0.78
1978	1.30	61	4.68	14	1.08
1979	1.17	52	4.44	15	1.28
1980	1.18	38	3.23	8	0.68
1981	1.24	31	2.5	9	0.73
1982	1.30	26	2.00	5	0.38
1983	1.51	18	1.19	2	0.13
1984	1.75	22	1.26	7	0.40
1985	1.74	21	1.21	7	0.40
1986	1.41	15	1.06	2	0.14
1987(P)	1.46	35	2.39	10	0.68

1/ Per 100,000 flight hours

(P) Preliminary

Source: National Transportation Safety Board, SB 88-01

AIR TAXI SAFETY STATISTICS

<u>YEAR</u>	<u>FLIGHT HOURS (Millions)</u>	<u>TOTAL ACCIDENTS</u>	<u>ACCIDENT RATE 1/</u>	<u>FATAL ACCIDENTS</u>	<u>FATAL ACCIDENT RATE 1/</u>
1977	3.30	158	4.78	31	0.94
1978	3.55	198	5.58	54	1.52
1979	3.68	160	4.34	30	0.81
1980	3.62	171	4.73	46	1.27
1981	2.90	157	5.42	40	1.38
1982	3.26	132	4.05	31	0.95
1983	2.57	140	5.44	27	1.05
1984	3.08	146	4.74	23	0.75
1985	2.78	152	5.46	35	1.26
1986	2.91	117	4.02	32	1.10
1987(P)	2.90	98	3.38	31	1.07

1/ Per 100,000 flight hours

(P) Preliminary

Source: National Transportation Safety Board, SB 88-01

FY 1987 SURVEILLANCE ACTIVITY FOR PART 121 OPERATORS AND PART 135 COMMUTERS

1) Part 121 Operators

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Aerial Transit Co.	55	38	93	40.86
Aerial Virgin Islands Corp	1	0	1	0.
Aero West Airlines Inc.	105	39	144	27.08
Aeron International Airli	102	4	106	3.77
Air Atlanta Inc.	234	41	275	14.91
Air Cal Inc.	710	125	835	14.97
Air Cortez International	40	18	58	31.03
Air Illinois Inc.	6	32	38	84.21
Air Midwest Inc.	18	1	19	5.26
Air New Orleans Inc.	0	2	2	100.0
Air Specialties Corp.	94	39	133	29.32
Air Train Inc.	4	0	4	0.
Air Wisconsin Inc.	691	244	935	26.10
Airborne Express Inc.	541	262	803	32.63
Aireast and Westfield Avi.	1	0	1	0.
Airlift International Inc.	61	27	88	30.68
Airways International Inc.	35	15	50	30.00
Alaska Airlines Inc.	1286	541	1827	29.61
Alaska Island Air Inc.	3	0	3	0.
Aloha Airlines Inc.	108	77	185	41.62
Alpha Aviation Inc.	8	1	9	11.11
America West Airlines Inc.	1084	332	1416	23.45
American Airlines Inc.	6290	1029	7319	14.06
American Trans Air Inc.	241	197	438	44.98
Amerijet International Inc.	60	37	97	38.14
Arrow Air Inc.	247	122	369	33.06
Aspen Airways Inc.	222	159	381	41.73
Atlantic Southeast Airline	758	305	1063	28.69
Bar Harbor Airways Inc.	92	33	125	26.40
Blue Bell Inc.	71	28	99	28.28
Bowman Aviation Inc.	94	53	147	36.05
Braniff Inc.	850	262	1112	23.56
Brennan and Hargreaves Inc.	1	0	1	0.
Britt Airways Inc.	366	119	485	24.54
Brockway Air Inc. Vt	108	24	132	18.18
Buffalo Airways Inc.	144	92	236	38.98

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Business Express Inc.	6	2	8	25.00
Caribbean Express Inc.	1	2	3	66.67
Catskill Airways Inc.	1	0	1	0.
CCair Inc.	29	2	31	6.45
Century Airlines Inc.	10	58	68	85.29
Challenge Air Transport	139	69	208	33.17
Chaparral Airlines Inc.	78	9	87	10.34
Chicago Airlines Inc.	19	49	68	72.06
Comair Inc.	216	58	274	21.17
Command Airways Inc.	108	30	138	21.74
Conner Airlines Inc.	35	59	94	62.77
Connie Kalitta Services Inc.	103	57	160	35.63
Continental Airlines Inc.	3522	1089	4608	23.57
Delta Air Lines Inc.	4030	1200	5230	22.94
DHL Airways Inc.	162	76	238	31.93
Eastern Air Lines Inc.	3867	1555	5422	28.68
Emerald Air Inc.	305	48	353	13.60
ERA Helicopters Inc.	61	12	73	16.44
Evergreen International A	396	240	636	37.74
Executive Air Charter	69	4	73	5.48
Express Airlines I Inc.	10	0	10	0.
Federal Express Corp.	911	412	1323	31.14
Fischer Brothers Aviation	10	6	16	37.50
Flight Trails	115	22	137	16.06
Florida Express Inc.	426	66	492	13.41
Florida West Airlines Inc.	92	66	158	41.77
Flying Tiger Line Inc.	635	238	873	27.76
Frontier Airlines Inc.	1	2	3	66.67
G P Express Airlines Inc.	1	0	1	0.
Galaxy Airlines Inc.	50	43	93	46.24
General Aviation Inc.	75	35	110	31.43
Great American Inc.	35	7	42	16.67
Gulf Air Inc.	122	30	152	19.74
Hawaiian Airlines Inc.	365	192	557	34.47
Henson Aviation Inc.	109	223	332	67.17
Holiday Airlines Inc.	0	20	20	100.00
Horizon Industries Inc.	611	649	1260	51.51
Independent Air Inc.	49	37	86	43.02
Intercoastal Airways Inc.	39	25	64	39.06
Interface Group Inc.	40	36	76	47.37
International Air Service	320	164	484	33.88

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
International Parcel Expr	98	36	134	26.87
Interstate Airlines Inc.	389	157	546	28.75
Jet America Airlines Inc.	344	91	435	20.92
Jet East International Ai	119	45	164	27.44
Jet Fleet Corp	51	20	71	28.17
Jetstream International A	2	1	3	33.33
Key Airlines Inc.	207	138	345	40.00
Lincoln Airlines Inc.	59	13	72	18.06
Markair Inc.	161	12	173	6.94
McClain Airlines Inc.	72	51	123	41.46
Mesa Air Shuttle Inc.	5	0	5	0.
Mesaba Aviation Inc.	129	21	150	14.00
Metro Express II Inc.	2	1	3	33.33
Metro Express Inc.	115	37	152	24.34
Metroflight Inc.	317	109	426	25.59
MGM Grand Air Inc.	18	1	19	5.26
Mid Pacific Airlines Inc.	166	64	230	27.83
Midstate Airlines Inc.	2	3	5	60.00
Midway Airlines Inc.	558	163	721	22.61
Midway Airlines 1984 Inc.	273	31	304	10.20
Midwest Express Airlines	225	70	295	23.73
Millon Air Inc.	47	30	77	38.96
New York Airlines Inc.	109	73	182	40.11
Northern Air Cargo Inc.	65	4	69	5.80
Northstar Aviation Inc.	2	0	2	0.
Northwest Airlines Inc.	3672	998	4670	21.37
Orion Air Inc.	664	444	1108	40.07
Ozark Air Lines Inc.	190	170	360	47.22
Pacific Air Express Inc.	3	26	29	89.66
Pacific Alaska Airlines I	132	68	200	34.00
Pacific Interstate Airlin	28	24	52	46.15
Pacific Southwest Airline	983	249	1232	20.21
Pan American World Airway	1687	635	2322	27.35
Pan Aviation Inc.	8	68	76	89.47
Pennsylvania Commuter Air	130	54	184	29.35
People Express Airlines I	546	355	901	39.40
Piedmont Aviation Inc.	2536	580	3116	18.61
Pilgrim Aviation and Airl	140	21	161	13.04
Pecond Airlines Inc.	4	0	4	0.

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Polar Alaska Enterprises	25	48	73	65.75
Presidential Airways Inc.	82	51	133	38.35
Providence Airline Corp.	53	32	85	37.65
Provincetown Boston Airli	136	36	172	20.93
Ransome Airlines	140	45	185	24.32
Reeve Aleutian Airways In	92	17	109	15.60
Renown Aviation Inc.	29	24	53	45.28
Rich International Airway	114	64	178	35.96
Rio Airways Inc.	0	20	20	100.00
Rocky Mountain Airways In	207	186	393	47.33
Rosenbalm Aviation Inc.	349	278	627	44.34
Ross Aviation Inc.	56	17	73	23.29
Royale Airlines Inc.	7	3	10	30.00
Ryan Air Service Inc.	2	0	2	0.
Ryan Aviation Corp	341	116	457	25.38
Sedalia Marshall Boonville	180	176	356	49.44
Sierra Pacific Airlines I	165	34	199	17.09
Simmons Airlines Inc.	364	127	491	25.87
Skybus Inc.	16	36	52	69.23
Skyfreighters Corp	48	49	97	50.52
Skystar International	42	90	132	68.18
Skywest Airlines Inc.	12	0	12	0.
Skyworld Airlines Inc.	204	128	332	38.55
South Pacific Island Airw	33	63	96	65.63
Southern Air Transport In	298	112	410	27.32
Southern Flyer Inc.	0	14	14	100.00
Southern Jersey Airways Inc.	40	18	58	31.03
Southwest Airlines Co	1356	268	1626	16.48
Stateswest Airlines Inc.	290	19	309	6.15
Suburban Airlines Inc.	103	60	163	36.81
Summit Airlines Inc.	43	69	112	61.61
Sun Country Airlines Inc.	114	61	175	34.86
Sunbird Air Inc.	29	10	39	25.64
Sunworld International Ai	234	75	309	24.27
Systems International Air	7	11	18	61.11
T P I International Airwa	68	58	126	46.03
Tennessee Airways Inc.	2	0	2	0.
Tower Air Inc.	319	55	374	14.71
Trans Air Link Corp	190	43	233	18.45
Trans Colorado Airlines I	6	2	8	25.00
Trans Continental Airline	75	55	130	42.30

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Trans Florida Airlines	27	9	36	25.00
Trans Global Airlines Inc.	3	54	57	94.74
Trans International Air	61	20	81	24.69
Trans World Airlines Inc.	3300	616	3916	15.73
Transamerica Airlines Inc.	70	71	141	50.35
Transtar Airlines Corp	393	201	594	33.84
United Air Carriers Inc.	0	10	10	100.00
United Airlines Inc.	6301	1059	7360	14.39
Universal Airlines Inc.	60	19	79	24.05
Unknown Name	1080	1290	2370	54.43
USAir Inc.	3208	738	3946	18.70
Viking International Airl	67	31	98	31.63
Westair Commuter Airlines	83	77	160	48.13
Western Airlines Inc.	936	389	1325	29.36
Wings West Airlines Inc.	7	2	9	22.22
World Airways Inc.	179	119	298	39.93
Zantop International Airl	463	162	625	25.92
Operator Total:	68,271	23,487	91,758	25.60%

2) Part 135 Commuters

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Aero Coach Aviation Inter	132	3	135	2.22
Aero Virgin Islands Corp	94	234	328	71.34
Air Caribe International	47	100	147	68.02
Air Chico Corp	19	8	27	29.63
Air Exchange Inc	74	42	116	36.21
Air Kentucky Airlines Inc	115	77	192	40.10
Air Lift Associates Inc	65	5	70	7.14
Air Link Airways Inc	21	10	31	32.26
Air Midwest Inc	596	193	789	24.46
Air Molokai Ltd	34	25	59	42.37
Air Nevada Airlines Inc	22	19	41	46.43
Air New Orleans Inc	52	326	378	86.24
Air Puerto Rico Airlines	41	264	305	86.56
Air South Inc	49	51	100	51.00
Air Sunshine Inc	57	16	73	21.92
Air Tour Acquisition Corp	48	24	72	33.33

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Air Wise Aviation	1	6	7	85.71
Alaska Island Air Inc	24	7	31	22.58
Alpha Aviation Inc	22	8	30	26.67
Alpine Aviation Inc	36	12	48	25.00
American Charter Inc	21	13	44	29.55
Arctic Circle Air Service	7	51	58	87.93
Atlantis Airlines Inc	65	16	81	19.75
Audi Air Inc	58	36	94	38.30
Avair Inc	165	68	233	29.18
Aviation Associates Inc	229	185	414	44.69
Aviation Services Ltd	35	16	51	31.37
Baker Aviation Inc	52	15	67	22.39
Bankair Inc	63	14	77	18.18
Barrow Air Inc	41	20	61	32.79
Beaver Aviation Service	45	25	70	35.71
Bemidji Aviation Service	105	21	126	16.67
Bering Air Inc	67	18	85	21.18
Biody Ta Hot Aana Corp	33	19	52	36.54
Big Island Air Inc	21	19	40	47.50
Big Sky Transportation Co	159	69	228	30.26
Brockway Air Inc	220	46	266	17.29
Business Express Inc	159	38	197	19.29
California Seaboard Airli	24	11	35	31.43
Cape Smythe Air Service I	76	16	92	17.39
Capitol Air Service Inc	100	7	107	6.54
Caribbean Express Inc	104	32	136	23.53
Catskill Airways Inc	123	25	148	16.89
CCAir Inc	37	41	78	52.56
Centennial Airlines Inc	63	18	81	22.22
Central Airlines Inc	1	0	1	0
Chalks International Airl	59	10	69	14.49
Chautauqua Airlines Inc	321	73	394	18.53
Christman Air Systems	85	18	103	17.48
Clearwater Flying Service	64	15	79	18.99
Coastal Air Transport Inc.	41	25	66	37.88
Colgan Airways Corp	17	17	34	50.00
Crown Air Inc.	161	261	422	61.85
Crown Airways Inc.	104	37	141	26.24
Custom Aviation Inc.	40	26	66	39.39

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Dade Helicopter Jet Servi	36	39	75	52.00
Direct Air Inc.	32	14	46	30.43
East Coast Airways Ltd	24	63	87	72.41
East Hampton Aire Inc.	91	58	149	38.93
Exec Express Inc.	51	9	90	10.00
Executive Air Charter	241	200	441	45.35
Express Airlines I Inc.	343	44	387	11.37
Flamenco Airways Inc.	132	196	328	59.76
Flight Line Inc.	31	17	48	35.42
Friendship Air Alaska Inc.	115	18	133	13.53
Frontier Flying Service I	58	17	75	24.00
G P Express Airlines Inc.	63	7	70	10.00
Galena Air Service Inc.	40	17	57	29.82
Grand Canyon Airlines	14	21	35	60.00
Great Lakes Aviation Ltd	113	5	118	4.24
Green Hills Aviation Ltd	21	12	33	36.36
Gull Air Inc.	36	53	89	59.55
Haines Airways Inc.	24	6	30	20.00
Harbor Airlines Inc.	30	12	42	28.57
Hawaii Pacific Helicopter	16	14	30	46.67
Helitrans Inc.	40	4	44	9.09
Hermens Air Inc.	95	7	102	6.86
Heussler Air Service Corp	20	13	33	39.39
Holiday Airlines Inc.	61	19	80	23.75
Howard, Roger L and Kahli	0	9	9	100.00
International Transfer Co	44	21	65	32.31
Island Airlines Inc.	10	7	17	41.18
Jet Express Inc.	33	14	47	29.79
Jetstream International A	176	73	249	29.32
Jib Inc.	72	6	78	7.69
Kendsha Aero Inc.	60	18	78	23.08
Kingman Aviation Inc.	49	10	59	16.95
L A B Flying Service Inc.	44	12	56	21.43
L A Helicopters Inc.	15	6	21	28.57
Larrys Flying Service	46	11	57	19.30
Las Vegas Airlines	13	14	27	51.85
Ludlow Aviation Inc.	12	0	12	0.
Mall Airways Inc.	173	53	226	23.45
Manua Air Transport	16	15	31	48.39
Maui Airlines Inc.	56	12	68	17.65

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Mesa Air Shuttle Inc.	239	28	267	10.49
Metro Express II Inc.	255	49	304	16.12
Midway Aviation Inc.	25	9	34	26.47
Midwest Aviation Div of S	60	10	70	14.29
Monarch Aviation Inc.	15	22	37	59.46
New York Helicopter Corp	12	45	57	78.95
Nicholson Air Service In	51	21	72	29.17
North American Helicopter	13	14	27	51.85
Northstar Aviation Inc.	41	22	63	34.92
Oklahoma Airways Inc.	93	5	98	5.10
Otter Air Inc.	2	8	10	80.00
Peninsula Airways Inc.	97	14	111	12.61
Pocono Airlines Inc.	60	61	121	50.41
Precision Valley Aviation	112	39	151	25.83
Prime Air Inc.	20	8	28	28.57
Princeton Air Link Corp	46	29	75	38.67
Princeville Airways Inc.	38	20	58	34.48
Reeves Aviation Inc.	41	36	77	46.75
Resort Air Inc.	366	100	466	21.46
Resort Commuter Inc.	56	9	65	13.85
Resorts International Air	23	23	46	50.00
Rio Airways Inc.	117	78	195	40.00
Royale Airlines Inc.	327	56	383	14.62
Ryan Air Service Inc.	198	28	226	12.39
S F O Helicopter Airlines	43	14	57	24.56
San Juan Airlines and Pea	58	7	65	10.77
Scenic Airlines Inc.	38	18	56	32.14
Skywest Airlines Inc.	323	84	407	20.64
South Central Air Inc.	63	6	69	8.70
Sumo Container Station In	0	19	19	100.00
Sunbird Inc.	16	1	17	5.88
Tennessee Airways Inc.	76	28	104	26.92
Trans Colorado Airlines I	196	33	229	14.41
Valley Flying Service Inc.	37	15	52	28.85
Vieques Air Link Inc.	134	283	417	67.87
Virgin Air Inc.	87	161	248	64.92
Virgin Island Seaplane Sh	118	200	318	62.89
Walkers Aviation Services	21	3	24	12.50

<u>OPERATOR</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Wheeler Flying Service In	38	26	64	40.63
Wings West Airlines Inc.	178	69	247	27.94
Wright Air Service Inc.	73	14	87	16.09
Yute Air Alaska Inc.	75	4	79	5.06
40 Mile Air Ltd	58	15	73	20.55
Operator Total	11,029	5,631	16,660	33.80%

<u>TOTALS</u>	<u>SATISFACTORY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>PERCENT OTHER THAN SATISFACTORY</u>
Part 121 Operators	68,271	23,487*	91,758	25.60%
Part 135 Operators	11,029	5,631**	16,660	33.80%
Total	79,300	29,118	108,418	26.86%

SOURCE: Data Services Division, AAC-300

NOTE: Data reported as "other" are WPMS activity results for the following:

- activity has been started;
- activity is planned;
- activity completed and record closed - more information available;
- activity was satisfactorily completed after follow-up action was taken on inspection findings;
- surveillance activity was unsatisfactorily completed and enforcement actions are indicated;
- surveillance activity is canceled.

*Includes 1,049 planned surveillance activities

**Includes 2,334 planned surveillance activities

